T0-220 POWER RESISTOR
- RTR30 SERIES -

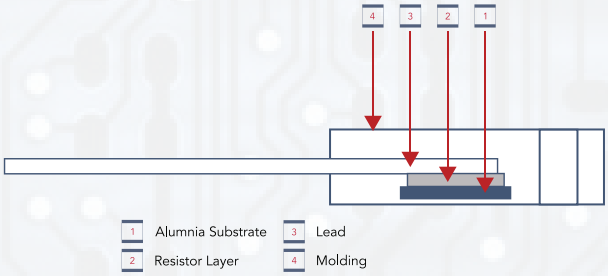
FEATURES

- 30 Watts at 25°C case temperature heat sink mounted.
- T0-220 style power package
- Single screw mounting to heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-Inductive design

APPLICATIONS

- Gate Resistors in Power Supplies
- Snubber
- Load and Dumping Resistors in CRT Monitors
- Terminal Resistance in RF Power Amplifiers
- Voltage Regluation
- Low Energy Pulse Loading
- UPS

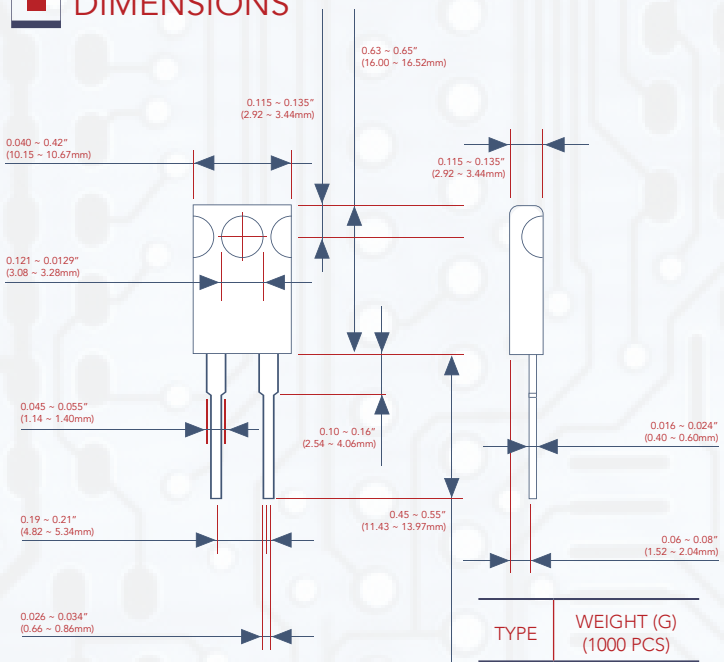
CONSTRUCTION



PART NUMBERING

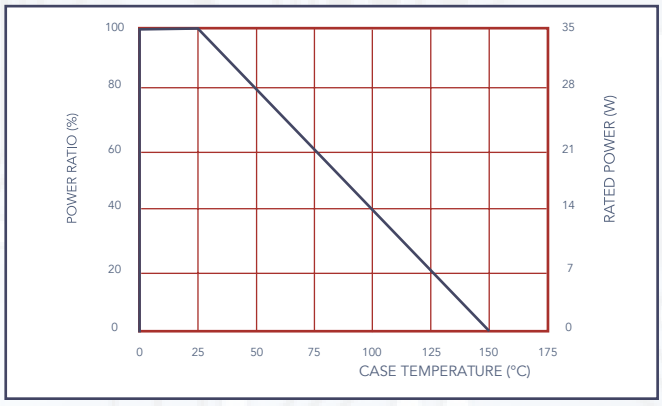
RTR	30	J	1001	B	50
PRODUCT TYPE	POWER	RESISTANCE TOLERANE	RESISTANCE	PACKING CODE	TCR (PPM / °C)
	30: 30 Watts	D: ±0.5% F: ±1% J: ±5% K: ±10%	R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1KΩ 1002: 10KΩ	B: Bulk	50: ±50 100: ±100 200: ±200 300: ±300

DIMENSIONS



TYPE	WEIGHT (G) (1000 PCS)
RTR30	1155

DERATING CURVE



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RoHS HF

ELECTRICAL CHARACTERISTICS SPECIFICATIONS

TYPE \ ITEM	RESISTANCE RANGE				TCR (PPM/°C)
	±0.5%	±1%	±5%	±10%	
RTR30	-	-	0.05Ω - 1Ω		Not Specified
	-	≥ 1Ω - 3Ω			± 300
	-	≥ 3Ω - 10Ω			±100 | ±200
	≥ 10Ω - 100KΩ				±50 | ±100 | ±200

- Operating Voltage: 420V Max
- Dielectric Strength: 1800VAC
- Insulation Resistance: 10GΩ min.
- Working Temperature Range: -65°C to +150°C
- Resistance Value <1Ω is available

ENVIRONMENTAL CHARACTERISTICS

ITEM	REQUIREMENT	TEST METHOD
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C, ΔR taken at +105°C
Short Time Overload	ΔR ± 0.3%	2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds
Load Life	ΔR ± 1.0%	2,000 hours at rated power
Damp Heat with Load	ΔR ± 0.5%	40±2°C, 90~95% R.H., RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	90% min coverage	245±5°C for 3 seconds
Thermal Shock	ΔR ± 0.3%	-65°C ~150°C, 100 cycles
Terminal Strength	ΔR ± 0.2%	(Pull Test) 2.4N
Vibration, High Frequency	ΔR ± 0.2%	20g peak

RCWV (Rated Continuous Working Voltage) $-\sqrt{(P*R)}$ or Max. Operating Voltage whichever is lower.

- Lead Material: Tinned Copper
- Maximum Torque: 0.9 N-m
- When in Free Air at 25°C, the RTR30 is Rated for 2.25W.
- The Case Temperature is to be used for the Definition of the Applied Power Limit.
- The Case Temperature Measurement Must be Made with a Thermocouple Contacting the Center of the Component Mounted on the Designed Heat Sink.
- Thermal Grease Should be Applied Properly.

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